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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,504	07/28/2003	Gregory A. Ehlers	68,180-003	5070

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EXAMINER

WHIPPLE, BRIAN P

ART UNIT	PAPER NUMBER
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2152

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/628,504

Applicant(s)

EHLERS ET AL.

Examiner

Brian P. Whipple

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/20/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-37 are pending in this application and presented for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 37 is rejected for lack of antecedent basis. Claim 37 claims a "method, as set forth in claim 29," however claim 29 claims a system, not a method.

For the purposes of examination, claim 37 will be read as a "system, as set forth in claim 29."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8, 10, 13-15, 18, and 21-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Ehlers et al. (Ehlers), U.S. Patent No. 5,572,438.

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6. As to claim 1, Ehlers discloses a method for managing demand for a commodity provided by a utility, the utility delivering the commodity to at least one customer site, the customer site having a plurality of devices which use the commodity, including the steps of:

providing a plurality of nodes, each node being associated with each device (Col. 4, ln. 6-19 and 50-63);

defining a program having a subset of the plurality of devices for which usage of the commodity may be managed by activating the program (Col. 10, ln. 13-31; Col. 11, ln. 26-36);

measuring, by the associated nodes, the instantaneous rate at which the commodity is being delivered to the subset of the devices (Col. 1, ln. 38-48; Col. 33, ln. 28-32);

activating the program and responsively managing usage of the commodity to the subset of devices via the nodes in accordance with the program (Col. 10, ln. 13-31);

determining an actual consumption of the commodity at the at least one customer site during activation of the program (Col. 27, ln. 5-38).

7. As to claim 2, Ehlers discloses the step of subsequently measuring at least one of a rate and a change in the rate at which the commodity is being delivered to the subset of the devices (Col. 1, ln. 38-48).

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8. As to claim 3, Ehlers discloses the step of determining an actual capacity of the commodity saved by activating the program (Col. 27, ln. 5-38; "For example, the user can then determine how much can be saved by operating a specific appliance on a different schedule.").

9. As to claim 4, Ehlers discloses the step of providing at least one of an alternate rate and a billing adjustment to at least one customer as a function of the actual consumption at the related customer site during activation of the program (Col. 1, ln. 38-48; Col. 15, ln. 5-11; Col. 28, ln. 56-64).

10. As to claim 5, Ehlers discloses at least one of an alternative rate and a billing adjustment is also a function of historical usage information (Col. 1, ln. 31-48; rates and billing are based on peak and off-peak hours, which is a function of historical usage information).

11. As to claim 6, Ehlers discloses the step of verifying management of the devices within the subset of the devices (Col. 29, ln. 24-28).

12. As to claim 7, Ehlers discloses the utility delivers the commodity to a plurality of customer sites, each customer site having a plurality of devices and the step of defining the program includes the step of including within the program all devices of a similar type at each customer site (Col. 11, ln. 26-36; Col. 31, ln. 49 – Col. 50, ln. 2).

13. As to claim 8, Ehlers discloses the step of allowing a customer to subscribe to the program (Col. 10, ln. 13-31).

14. As to claim 10, Ehlers discloses the utility delivers the commodity to a plurality of customer sites, each customer site having a plurality of devices and the step of defining at least one program includes the step of defining a plurality of programs, each program having a respective subset of the devices (Col. 10, ln. 31-38; Col. 11, ln. 26-36).

15. As to claim 13, Ehlers discloses the commodity is electrical power (Abstract, ln. 10-11).

16. As to claim 14, Ehlers discloses the commodity is water (Col. 32, ln. 38-45).

17. As to claim 15, Ehlers discloses the commodity is one of natural, gas and steam (Col. 32, ln. 38-45).

18. As to claim 18, Ehlers discloses the step of providing a utility interface (Abstract, ln. 15-21).

19. As to claim 21, Ehlers discloses the step of managing the subset of devices in response to activation of the program (Col. 10, ln. 13-31; Col. 11, ln. 26-36).

20. As to claim 22, Ehlers discloses the step of managing the subset of devices includes the step of controlling usage of the commodity during a predetermined period of time (Col. 1, ln. 31-48).

21. As to claim 23, Ehlers discloses at least one of the devices has an operating setpoint, and wherein the step of controlling the subset of devices includes the step of modifying the setpoint (Col. 10, ln. 13-38).

22. As to claim 24, Ehlers discloses the steps of receiving a supply request and allowing an operator to responsively activate the program (Col. 10, ln. 13-38).

23. As to claim 25, Ehlers discloses the supply request includes a request duration, wherein the program may be activated as a function of the request duration (Col. 1, ln. 31-48).

24. As to claim 26, Ehlers discloses the step of downloading to each node, a program schedule containing scheduling information for the program (Col. 2, ln. 44-57; Col. 3, ln. 35-48).

25. As to claim 27, Ehlers discloses the step of providing a gateway node coupled between the nodes and the utility (Abstract, ln. 21-29).

26. As to claim 28, Ehlers discloses each of the nodes is one of a load metering node, a control node, and a load control node (Abstract, ln. 21-29).

27. As to claims 29-30, the claims are rejected for the same reasons as claim 1 above.

28. As to claim 31, Ehlers discloses the control system for determining at least one of an actual rate of consumption of the commodity and a change in a rate of consumption induced by activating of the program (Col. 1, ln. 31-48; Col. 3, ln. 35-48).

29. As to claim 32, the claim is rejected for the same reasons as claim 4 above.

30. As to claim 33, the claim is rejected for the same reasons as claim 5 above.

31. As to claim 34, the claim is rejected for the same reasons as claim 6 above.

32. As to claim 35, the claim is rejected for the same reasons as claim 10 above.

33. As to claim 36, the claim is rejected for the same reasons as claim 27 above.

34. As to claim 37, the claim is rejected for the same reasons as claim 28 above.

Claim Rejections - 35 USC § 103

35. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

36. Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehlers as applied to claim 1 above, in view of Sterling et al. (Sterling), U.S. Patent No. 4,317,175.

37. As to claim 9, Ehlers discloses the invention substantially as in parent claim 1, but is silent on the program is mandatory.

However, Sterling discloses the program is mandatory (Col. 1, ln. 36-42; Col. 1, ln. 52 – Col. 2, ln. 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Ehlers by making the program mandatory as taught by Sterling in order to reduce energy consumption during emergency situations (Sterling, Col. 1, ln. 62 – Col. 2, ln. 2) and force the customer to participate in the program that allows the management of consumption.

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38. As to claim 20, Ehlers discloses the invention substantially as in parent claim 1, but is silent on automatically activating the program under a predetermined set of conditions.

However, Sterling discloses automatically activating the program under a predetermined set of conditions (Col. 1, ln. 52 – Col. 2, ln. 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Ehlers by automatically activating the program under a predetermined set of conditions as taught by Sterling in order to reduce energy consumption during emergency situations (Sterling, Col. 1, ln. 62 – Col. 2, ln. 2) and force the customer to participate in the program that allows the management of consumption.

39. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehlers as applied to claim 10 above, in view of Koperda et al. (Koperda), U.S. Patent No. 6,230,203 B1.

40. As to claim 11, Ehlers disclose the invention substantially as in parent claim 10, including delivery of the commodity which may be available for management by one or more programs (Col. 10, ln. 13-38), but is silent on determining in real time a capacity associated with the delivery.

However, Koperda does disclose determining in real time a capacity associated with the delivery (Col. 4, ln. 40-60; Col. 13, ln. 6-14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Ehlers by determining in real time a capacity associated with the delivery as taught by Koperda in order to offer different levels of services (Koperda, Col. 4, In. 40-60) and monitor the total capacity of the provider to prevent overload.

41. As to claim 12, Ehlers and Koperda disclose the invention substantially as in parent claim 11, including providing a graphical representation (Ehlers, Fig. 35) and a representation of the capacity available (Koperda, Col. 4, In. 40-60).

42. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehlers as applied to claim 1 above, in view of Routtenberg et al. (Routtenberg), U.S. Publication No. 2002/0049717 A1.

43. As to claim 16, Ehlers discloses the invention substantially as in parent claim 1, including defining a plurality of programs, each program having a respective subset of the devices (Ehlers, Col. 10, In. 31-38; Col. 11, In. 26-36), but is silent on providing a search function for identifying at least one program which matches a set of conditions.

However, Routtenberg discloses providing a search function for identifying at least one program which matches a set of conditions ([0059], In. 11-19).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Ehlers by providing a search function for identifying

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at least one program which matches a set of conditions as taught by Routtenberg in order to allow a user to search by desired criteria to find an appropriate program (Routtenberg, [0059], ln. 11-19).

44. As to claim 17, Ehlers and Routtenberg disclose the invention substantially as in parent claim 16, including the set of conditions includes an available capacity (Routtenberg, [0059], ln. 11-19).

45. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ehlers as applied to claim 18 above, in view of Lortz et al. (Lortz), U.S. Patent No. 6,876,889 B1.

46. As to claim 19, Ehlers discloses the invention substantially as in parent claim 18, including a microcomputer acting as a communications gateway for a customer and passing messages from the utility company to the microcomputer or messages being passed from the microcomputers (Ehlers, Abstract, ln. 15-29), but does not explicitly disclose the communication taking place via the use of a web browser.

However, Lortz discloses interfacing through a web browser (Col. 2, ln. 36-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Ehlers by interfacing through a web browser as taught by Lortz in order to allow a user to access a rule processing system (Lortz, Col. 2, ln. 36-45) which would be useful in the environment of Ehlers as the customer must

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define how loads should be handled in response to rate changes and doing so through a browser would provide ease of use.

47. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brown, Jr. et al., U.S. Patent No. 5,544,036 discloses an energy management and home automation system.

Mun, U.S. Patent No. 5,579,221 discloses a home automation system having user controlled definition function.

Reisman, U.S. Patent No. 6,557,054 B2 discloses a method and system for distributing updates by presenting directory of software available for user installation that is not already installed on user station.

Bilger, U.S. Patent No. 6,756,998 B1 discloses a user interface and method for home automation system.

Kodosky et al., U.S. Patent No. 7,062,718 B2 discloses a configuration diagram which graphically displays program relationship.

48. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Whipple whose telephone number is (571) 270-1244. The examiner can normally be reached on Mon-Fri (8:30 AM to 5:00 PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax

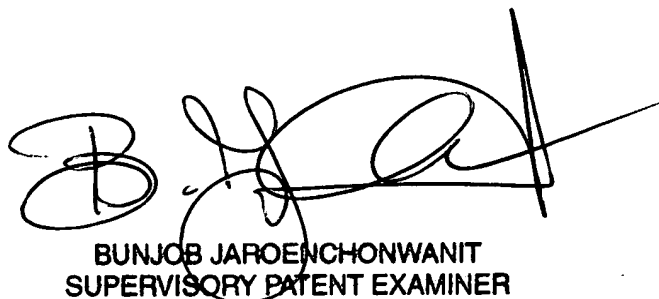
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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BPW

Brian P. Whipple
3/19/07



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